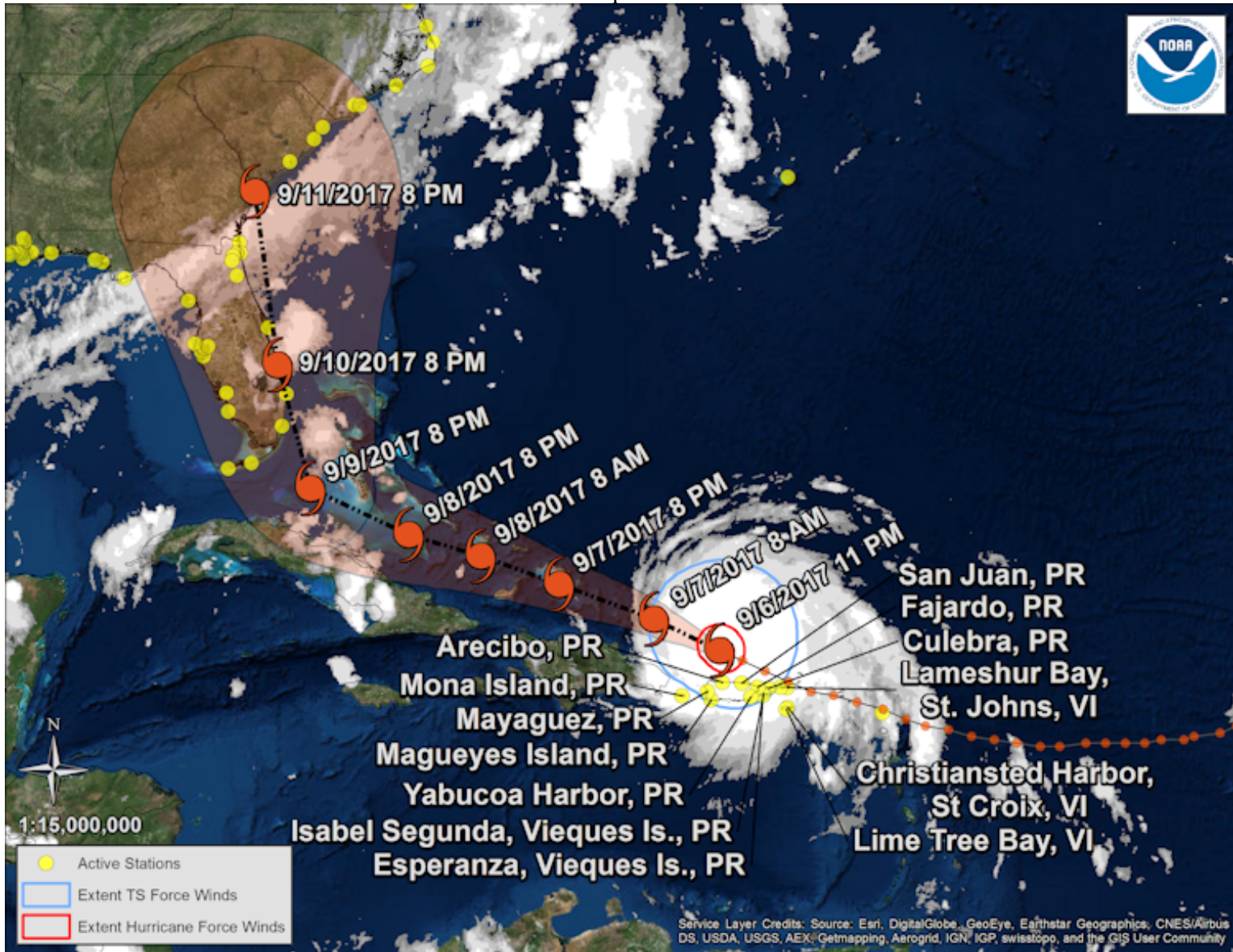




# Hurricane IRMA QuickLook Posted: 00:00 AST 09/07/2017

## NOAA and NOAA Partnership Stations Relative to the Storm



## Storm Analysis

As of 09/07/2017 00:00 AST, water levels at many locations across Puerto Rico are beginning to decrease following the latest high tide and as Hurricane Irma begins to move away from the area. Water levels at Mayaguez and Mona Island are still rising. Across Puerto Rico, water levels are measuring between 0.3 and 1.2 feet above normal tide levels. Notable preliminary peak water levels over the past 12 hours include 1.27 feet above Mean Higher High Water (MHHW) at San Juan, PR and 1.66 feet above MHHW at Christiansted Harbor, St. Croix.

Wind speeds are also decreasing except locations in western Puerto Rico. In general, wind speeds across Puerto Rico range between 15 and 30 kts with some gusts of 30 to 50 kts being observed.

Water Level and Meteorological plots available below are updated automatically. A line denoting Mean Higher High Water (MHHW) is displayed to provide an approximate indication of when flooding inundation may occur.

For additional data, please see the Center for Operational Oceanographic Products & Services website. For more information or archived products and reports, please see the Storm QuickLook Homepage.

Analyst: PFF

-----  
SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

Hurricane Irma Advisory Number 32  
NWS National Hurricane Center Miami FL AL112017  
1100 PM AST Wed Sep 06 2017

...EYE OF CATEGORY 5 HURRICANE IRMA CONTINUES PASSING JUST NORTH OF PUERTO RICO...

SUMMARY OF 1100 PM AST...0300 UTC...INFORMATION  
-----

LOCATION...19.4N 66.8W  
ABOUT 85 MI...135 KM NNW OF SAN JUAN PUERTO RICO  
ABOUT 315 MI...505 KM ESE OF GRAND TURK ISLAND  
MAXIMUM SUSTAINED WINDS...185 MPH...295 KM/H  
PRESENT MOVEMENT...WNW OR 290 DEGREES AT 16 MPH...26 KM/H  
MINIMUM CENTRAL PRESSURE...916 MB...27.05 INCHES

WATCHES AND WARNINGS  
-----

CHANGES WITH THIS ADVISORY:

The Hurricane Warning for the U.S. and British Virgin Islands has been discontinued.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT:

A Hurricane Warning is in effect for...

- \* Puerto Rico, Vieques, and Culebra
- \* Dominican Republic from Cabo Engano to the northern border with Haiti
- \* Haiti from the northern border with the Dominican Republic to Le Mole St. Nicholas
- \* Southeastern Bahamas and the Turks and Caicos Islands
- \* Central Bahamas

A Hurricane Watch is in effect for...

- \* Cuba from Matanzas province eastward to Guantanamo province
- \* Northwestern Bahamas

A Tropical Storm Warning is in effect for...

- \* Dominican Republic from south of Cabo Engano westward to the southern border with Haiti

- \* Haiti from south of Le Mole St. Nicholas to Port-Au-Prince
- \* Cuba provinces of Guantanamo, Holguin, and Las Tunas

A Hurricane Warning means that hurricane conditions are expected somewhere within the warning area. Preparations to protect life and property should be rushed to completion.

A Hurricane Watch means that hurricane conditions are possible within the watch area. A watch is typically issued 48 hours before the anticipated first occurrence of tropical-storm-force winds, conditions that make outside preparations difficult or dangerous.

A Tropical Storm Warning means that tropical storm conditions are expected somewhere within the warning area.

Interests elsewhere in the Dominican Republic and Haiti, as well as Cuba, the northwestern Bahamas, and Florida should monitor the progress of Irma.

For storm information specific to your area in the United States, including possible inland watches and warnings, please monitor products issued by your local National Weather Service forecast office. For storm information specific to your area outside the United States, please monitor products issued by your national meteorological service.

## DISCUSSION AND 48-HOUR OUTLOOK

At 1100 PM AST (0300 UTC), the center of Hurricane Irma was located near latitude 19.4 North, longitude 66.8 West. Irma is moving toward the west-northwest near 16 mph (26 km/h), and this general motion is expected to continue for the next couple of days. On the forecast track, the extremely dangerous core of Irma will continue to pass just north of Puerto Rico tonight, pass near or just north of the coast of Hispaniola Thursday, and be near the Turks and Caicos and southeastern Bahamas by Thursday evening.

Maximum sustained winds are near 185 mph (295 km/h) with higher gusts. Irma is a category 5 hurricane on the Saffir-Simpson Hurricane Wind Scale. Some fluctuations in intensity are likely during the next day or two, but Irma is forecast to remain a powerful category 4 or 5 hurricane during the next couple of days.

Hurricane-force winds extend outward up to 50 miles (85 km) from the center and tropical-storm-force winds extend outward up to 185 miles (295 km).

The estimated minimum central pressure is 916 mb (27.05 inches).

## HAZARDS AFFECTING LAND

**STORM SURGE:** The combination of a life-threatening storm surge and large breaking waves will raise water levels ABOVE NORMAL TIDE LEVELS by the following amounts within the hurricane warning area near and to the north of the center of Irma. Near the coast, the surge will be accompanied by large and destructive waves.

Turks and Caicos Islands...15 to 20 ft  
Southeastern and central Bahamas...15 to 20 ft  
Northern coast of the Dominican Republic...3 to 5 ft  
Northern coast of Haiti and the Gulf of Gonave...1 to 3 ft  
Northern coast of Cuba in the warning area...5 to 10 ft

The combination of a life-threatening storm surge and the tide will cause normally dry areas near the coast to be flooded by rising waters moving inland from the shoreline. The water is expected to reach the following HEIGHTS

ABOVE GROUND if the peak surge occurs at the time of high tide...

Northern coast of Puerto Rico...2 to 4 ft

Southern coast of Puerto Rico...1 to 3 ft

Water levels in the U.S. and British Virgin Islands will gradually subside tonight and early Thursday.

The deepest water will occur along the immediate coast in areas of onshore winds, where the surge will be accompanied by large and destructive waves. Surge-related flooding depends on the relative timing of the surge and the tidal cycle, and can vary greatly over short distances. For information specific to your area, please see products issued by your local National Weather Service forecast office.

WIND: Tropical Storm and Hurricane conditions will continue to spread westward over portions of Puerto Rico tonight. Hurricane conditions are expected to begin within the hurricane warning area in the Dominican Republic and Haiti early Thursday, with tropical storm conditions beginning later tonight. Hurricane conditions are expected to begin in the warning area in the southeastern Bahamas and the Turks and Caicos Islands by late Thursday with tropical storm conditions by early Thursday. These conditions will spread into the Central Bahamas by Thursday night or early Friday.

Hurricane and tropical storm conditions are possible within the watch area in Cuba by Friday. Tropical storm conditions are expected to begin within the warning area in Cuba Thursday night.

RAINFALL: Irma is expected to produce the following rain accumulations through Saturday:

Northern Leeward Islands...Additional 1 to 3 inches. Storm total 8 to 12 inches, isolated 20 inches.

Northeast Puerto Rico and the British and U.S. Virgin Islands...6 to 12 inches, isolated 20 inches. Southwest Puerto Rico...3 to 6 inches, isolated 10 inches.

The Southern Leeward Islands, and Saint Croix...2 to 4 inches.

Southeast Bahamas, Central Bahamas, and the Turks and Caicos...8 to 12 inches, isolated 20 inches.

Northern Dominican Republic and northern Haiti...4 to 10 inches, isolated 15 inches.

Eastern and Central Cuba...4 to 10 inches, isolated 15 inches. Southwest Haiti...1 to 4 inches.

In all areas this rainfall may cause life-threatening flash floods and mudslides.

SURF: Swells generated by Irma will affect the northern Leeward Islands, Puerto Rico, the Virgin Islands, the southeastern Bahamas, the Turks and Caicos Islands, the northern coast of the Dominican Republic, and portions of the southeast coast of the United States during the next several days. These swells are likely to cause life-threatening surf and rip current conditions. Please consult products from your local weather office.

NEXT ADVISORY

-----

Next intermediate advisory at 200 AM AST.

Next complete advisory at 500 AM AST.

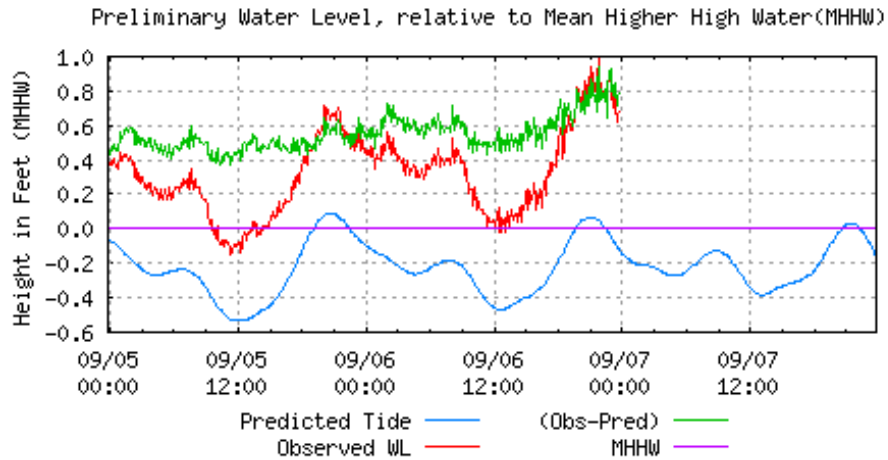
\$\$

Forecaster Pasch

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: [Mona Island - Water Level](#), [Mona Island - Barometric](#), [Mayaguez - Water Level](#), [Mayaguez - Winds](#), [Magueyes Island - Water Level](#), [Magueyes Island - Winds](#), [Magueyes Island - Barometric](#), [Arecibo - Water Level](#), [Arecibo - Winds](#), [Arecibo - Barometric](#), [San Juan, La Puntilla, San Juan Bay - Water Level](#), [San Juan, La Puntilla, San Juan Bay - Winds](#), [Yabucoa Harbor - Water Level](#), [Yabucoa Harbor - Winds](#), [Fajardo - Water Level](#), [Fajardo - Winds](#), [Esperanza, Vieques Island - Water Level](#), [Esperanza, Vieques Island - Winds](#), [Isabel Segunda, Vieques Island - Water Level](#), [Isabel Segunda, Vieques Island - Winds](#), [Culebra - Water Level](#), [Lime Tree Bay, St. Croix - Water Level](#), [Lime Tree Bay, St. Croix - Winds](#), [Lameshur Bay, St John - Water Level](#), [Christiansted Harbor, St Croix - Water Level](#), [Christiansted Harbor, St Croix - Winds](#)

NOAA/NOS/CO-OPS 9759938 Mona Island, PR



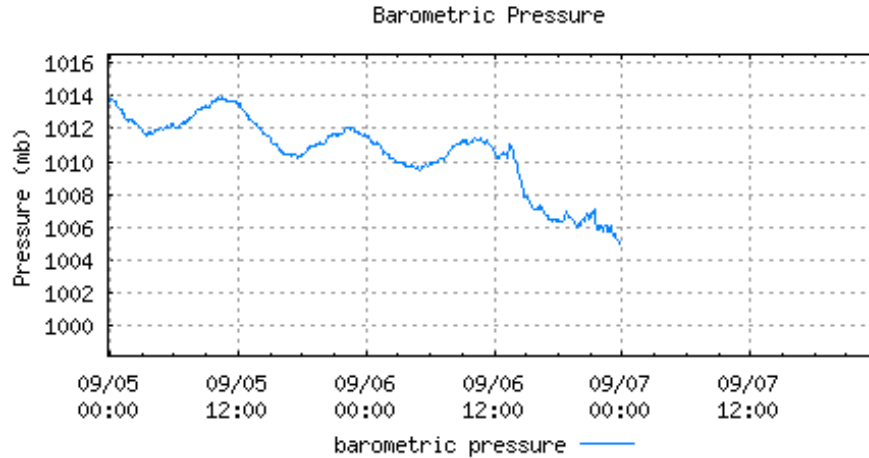
Last Observed Sample: 09/06/2017 23:48 (AST). Data relative to MHHW

Observed: 0.83 ft. Predicted: -0.12 ft. Residual: 0.95 ft.

Historical Maximum Water Level: Dec 23 2010, 1.24 ft.

Next High Tide: 09/07/2017 08:48 (AST), -0.13 ft.

NOAA/NOS/CO-OPS 9759938 Mona Island, PR

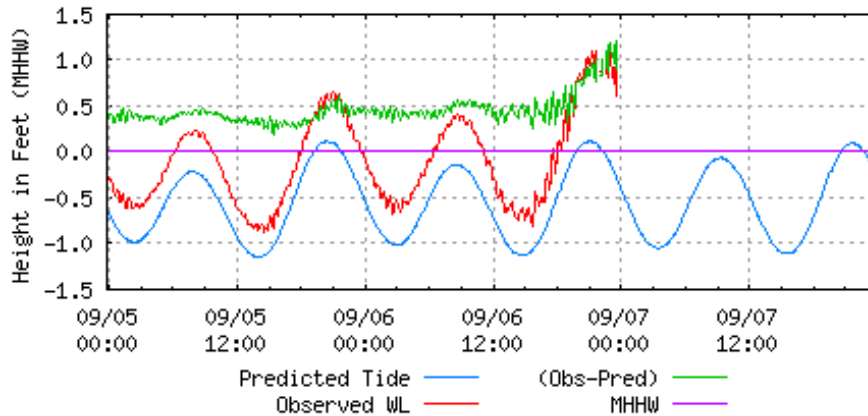


Last Observed Sample: 09/06/2017 23:48 (AST)

Barometric Pressure: 1005.1 mb

NOAA/NOS/CO-OPS 9759394 Mayaguez, PR

Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 09/06/2017 23:42 (AST). Data relative to MHHW

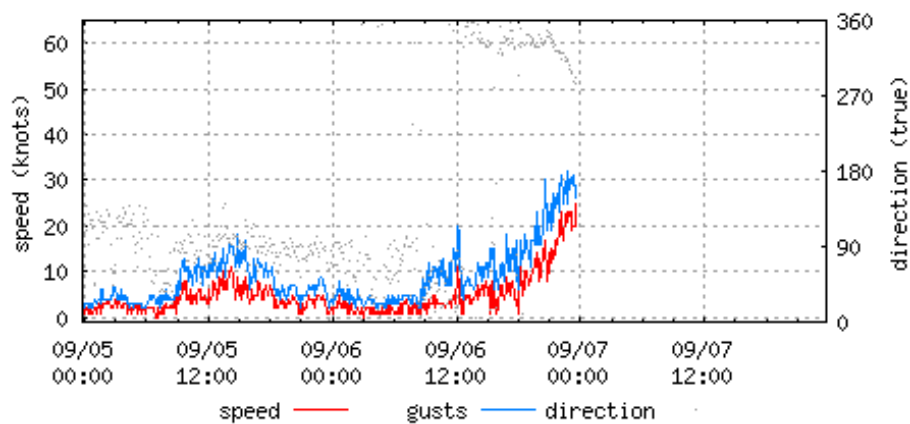
Observed: 0.93 ft. Predicted: -0.32 ft. Residual: 1.25 ft.

Historical Maximum Water Level: Oct 1 2015, 0.99 ft.

Next High Tide: 09/07/2017 09:17 (AST), -0.06 ft.

NOAA/NOS/CO-OPS 9759394 Mayaguez, PR

Wind Speed / Gusts / Direction

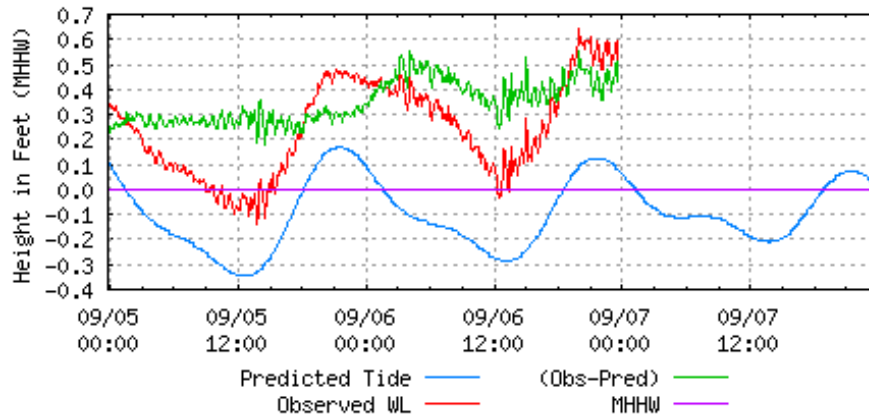


Last Observed Sample: 09/06/2017 23:42 (AST)

Wind Speed: 21 knots Gusts: 30 knots Direction: 280° T

NOAA/NOS/CO-OPS 9759110 Magueyes Island, PR

Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 09/06/2017 23:42 (AST). Data relative to MHHW

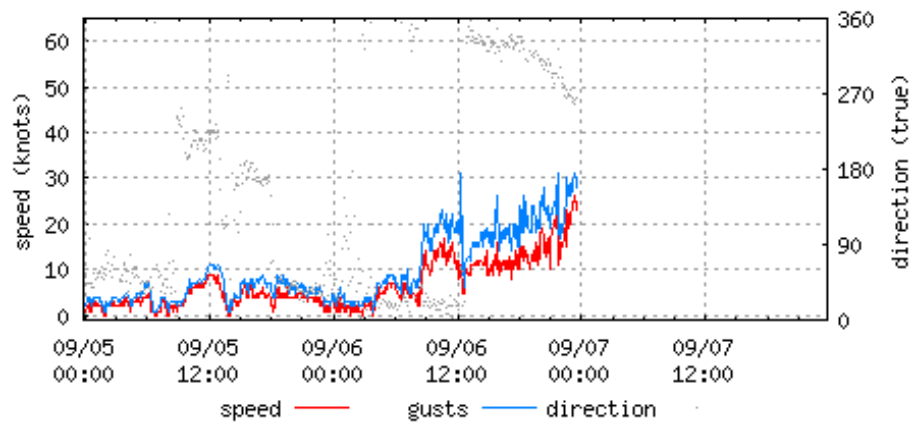
Observed: 0.51 ft. Predicted: 0.07 ft. Residual: 0.44 ft.

Historical Maximum Water Level: Sep 22 1998, 1.60 ft.

Next High Tide: 09/07/2017 07:29 (AST), -0.11 ft.

NOAA/NOS/CO-OPS 9759110 Magueyes Island, PR

Wind Speed / Gusts / Direction

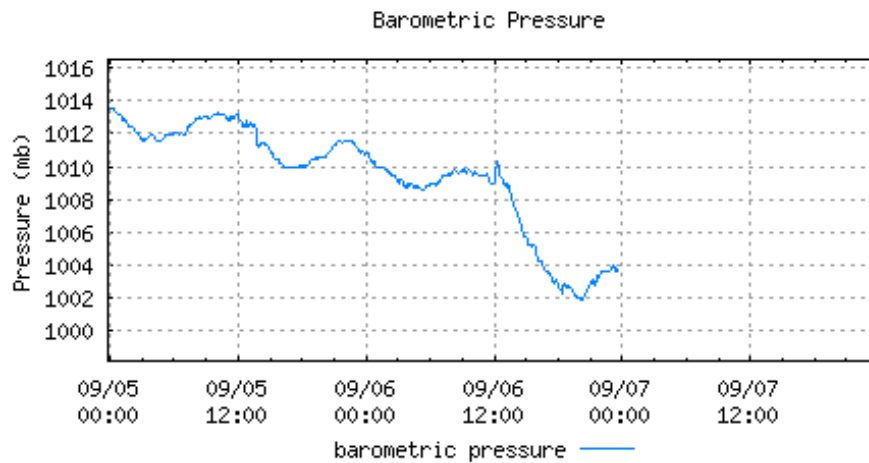


Last Observed Sample: 09/06/2017 23:42 (AST)

Wind Speed: 25 knots Gusts: 30 knots Direction: 262° T



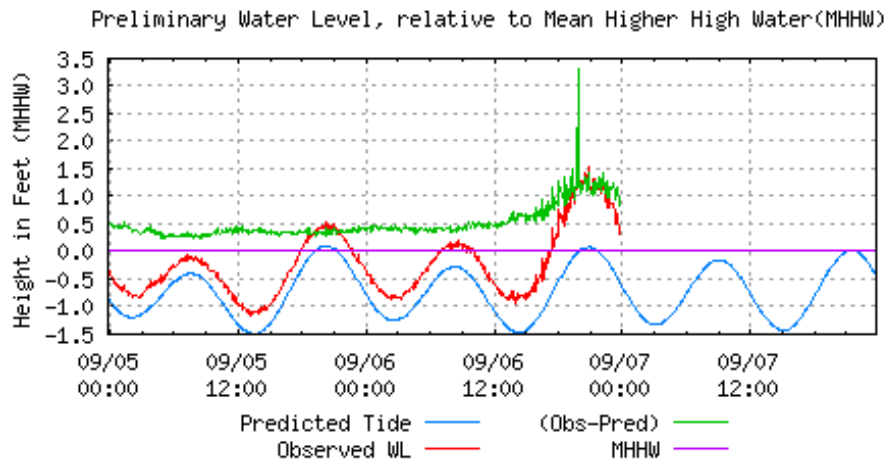
NOAA/NOS/CO-OPS 9759110 Magueyes Island, PR



Last Observed Sample: 09/06/2017 23:42 (AST)

Barometric Pressure: 1003.9 mb

NOAA/NOS/CO-OPS 9757809 Arecibo, PR



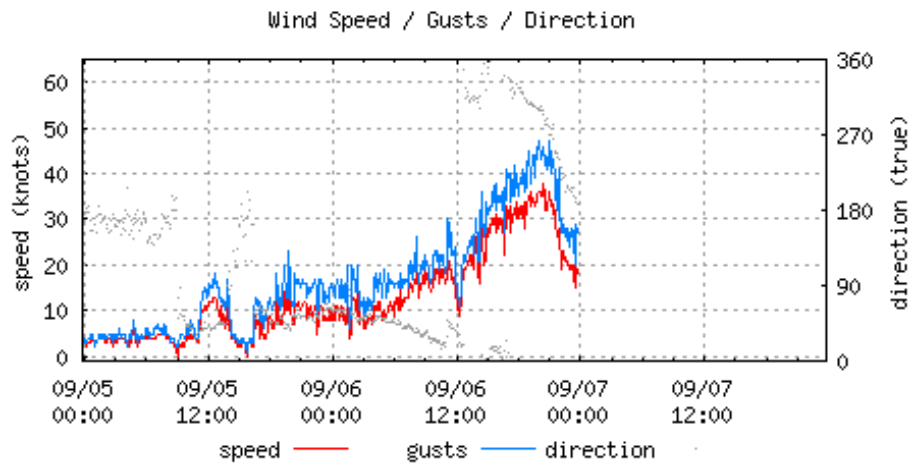
Last Observed Sample: 09/06/2017 23:48 (AST). Data relative to MHHW

Observed: 0.37 ft. Predicted: -0.57 ft. Residual: 0.94 ft.

Historical Maximum Water Level: Oct 8 2010, 0.90 ft.

Next High Tide: 09/07/2017 09:05 (AST), -0.15 ft.

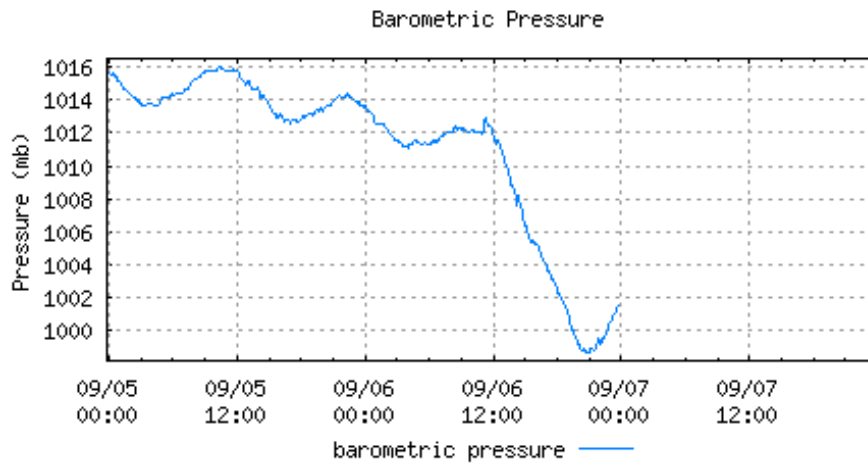
NOAA/NOS/CO-OPS 9757809 Arecibo, PR



Last Observed Sample: 09/06/2017 23:48 (AST)

Wind Speed: 17 knots Gusts: 21 knots Direction: 192° T

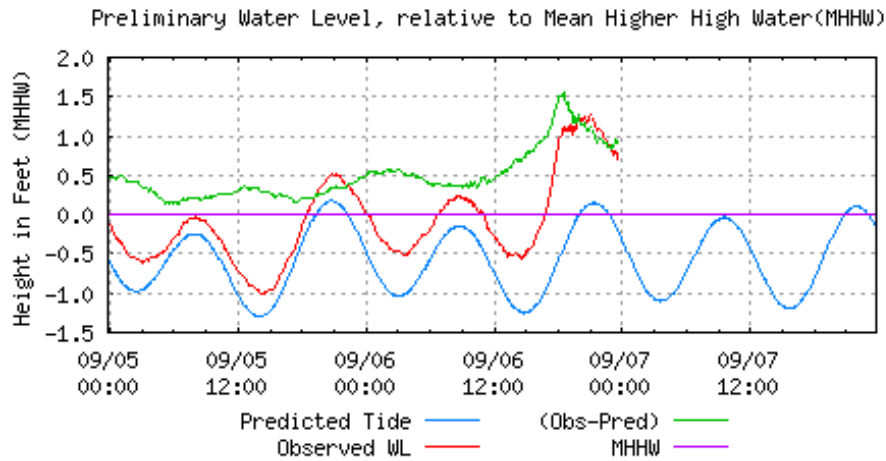
NOAA/NOS/CO-OPS 9757809 Arecibo, PR



Last Observed Sample: 09/06/2017 23:48 (AST)

Barometric Pressure: 1001.8 mb

NOAA/NOS/CO-OPS 9755371 San Juan, La Puntilla, San Juan Bay, PR



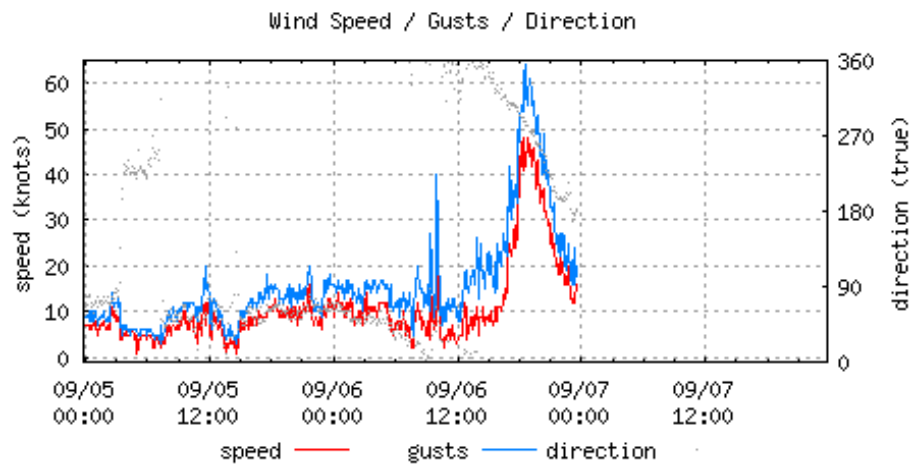
Last Observed Sample: 09/06/2017 23:42 (AST). Data relative to MHHW

Observed: 0.71 ft. Predicted: -0.23 ft. Residual: 0.94 ft.

Historical Maximum Water Level: Sep 18 1989, 2.77 ft.

Next High Tide: 09/07/2017 09:33 (AST), -0.04 ft.

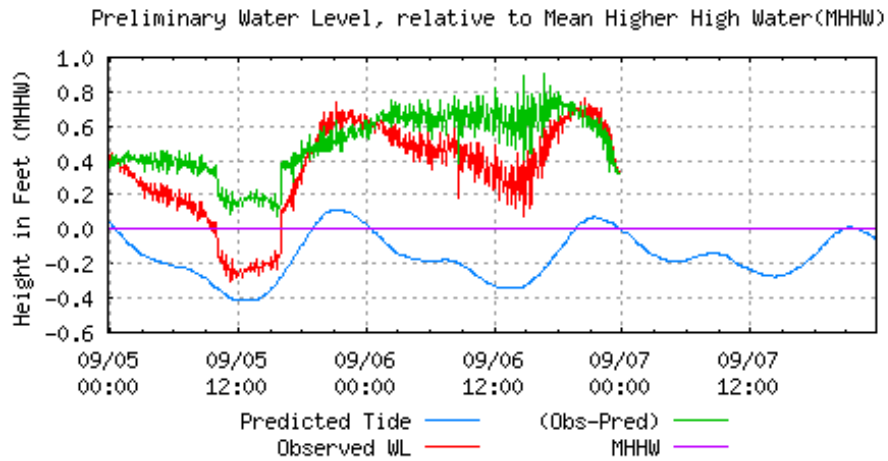
NOAA/NOS/CO-OPS 9755371 San Juan, La Puntilla, San Juan Bay, PR



Last Observed Sample: 09/06/2017 23:42 (AST)

Wind Speed: 16 knots Gusts: 20 knots Direction: 193° T

NOAA/NOS/CO-OPS 9754228 Yabucoa Harbor, PR



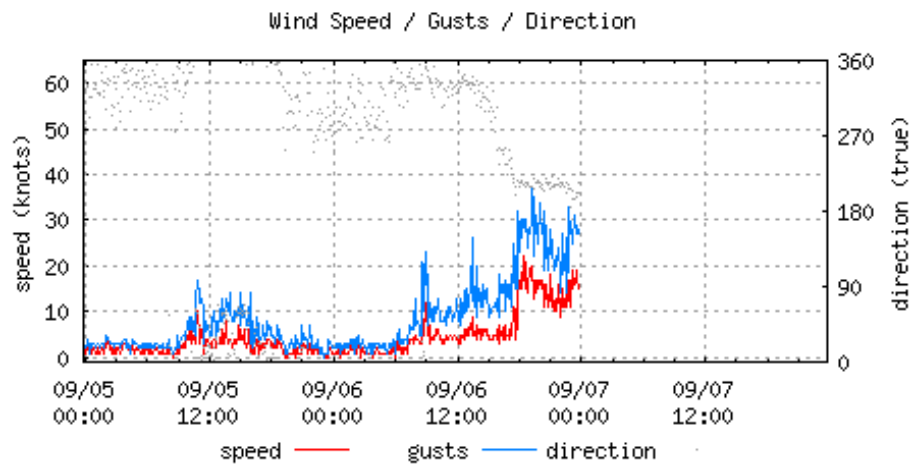
Last Observed Sample: 09/06/2017 23:48 (AST). Data relative to MHHW

Observed: 0.33 ft. Predicted: 0.00 ft. Residual: 0.33 ft.

Historical Maximum Water Level: n/a

Next High Tide: 09/07/2017 08:30 (AST), -0.14 ft.

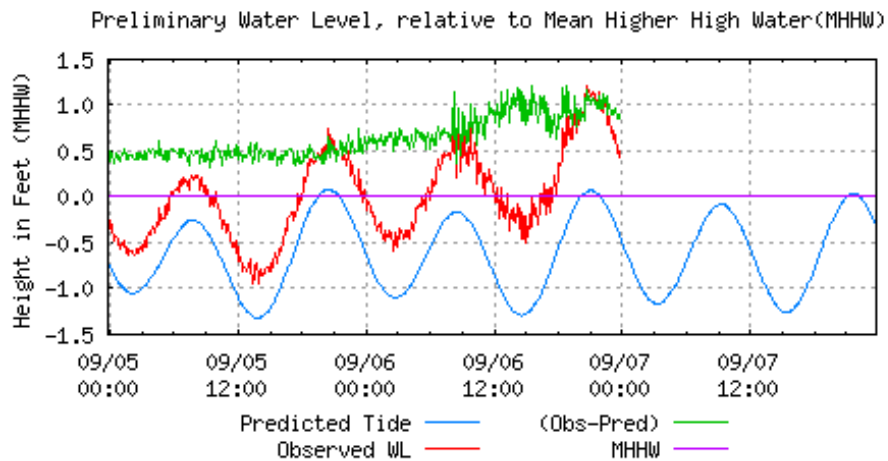
NOAA/NOS/CO-OPS 9754228 Yabucoa Harbor, PR



Last Observed Sample: 09/06/2017 23:48 (AST)

Wind Speed: 16 knots Gusts: 27 knots Direction: 203° T

NOAA/NOS/CO-OPS 9753216 Fajardo, PR



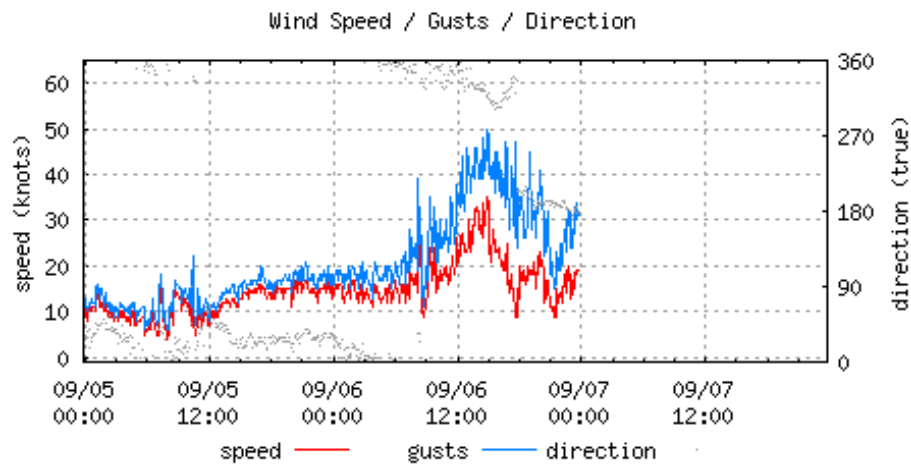
Last Observed Sample: 09/06/2017 23:48 (AST). Data relative to MHHW

Observed: 0.42 ft. Predicted: -0.44 ft. Residual: 0.86 ft.

Historical Maximum Water Level: Aug 30 2010, 0.84 ft.

Next High Tide: 09/07/2017 09:15 (AST), -0.08 ft.

NOAA/NOS/CO-OPS 9753216 Fajardo, PR

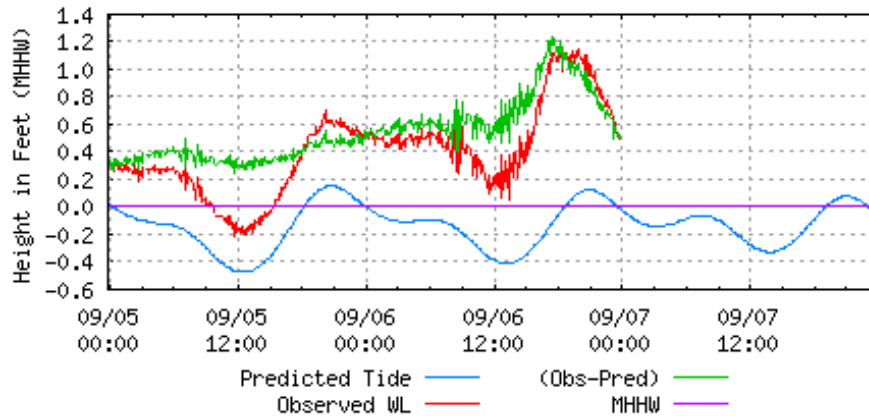


Last Observed Sample: 09/06/2017 23:48 (AST)

Wind Speed: 19 knots Gusts: 31 knots Direction: 181° T

NOAA/NOS/CO-OPS 9752695 Esperanza, Vieques Island, PR

Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 09/06/2017 23:48 (AST). Data relative to MHHW

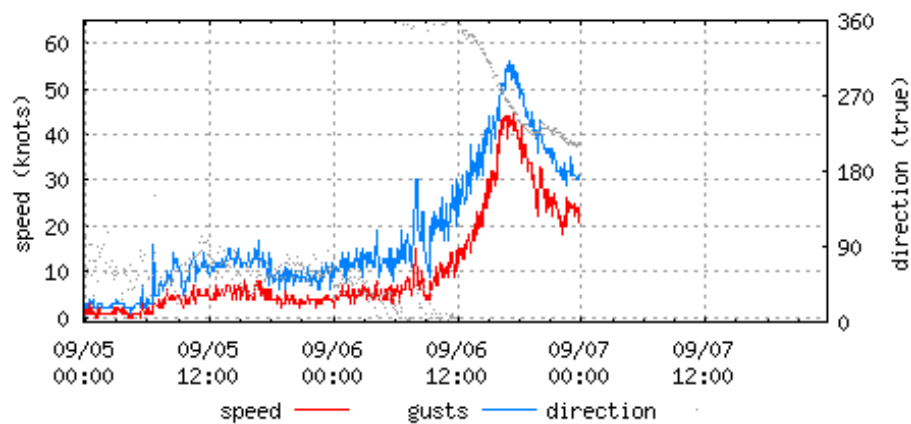
Observed: 0.50 ft. Predicted: -0.01 ft. Residual: 0.51 ft.

Historical Maximum Water Level: Aug 22 2011, 0.99 ft.

Next High Tide: 09/07/2017 07:27 (AST), -0.06 ft.

NOAA/NOS/CO-OPS 9752695 Esperanza, Vieques Island, PR

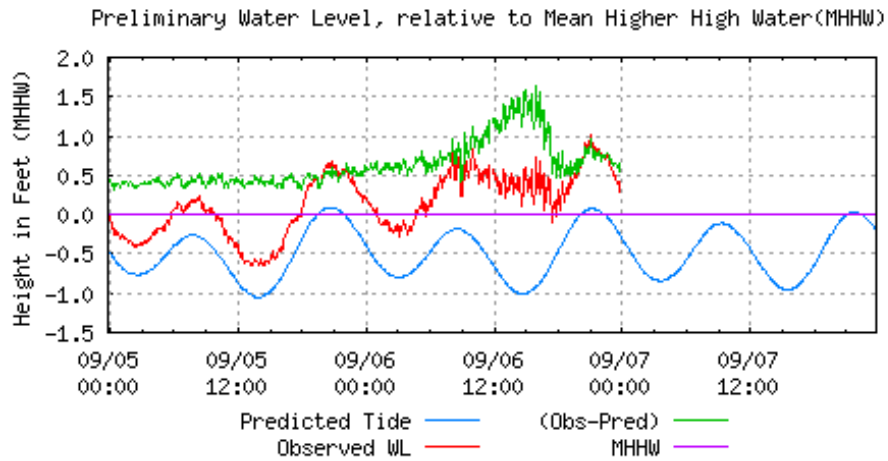
Wind Speed / Gusts / Direction



Last Observed Sample: 09/06/2017 23:48 (AST)

Wind Speed: 21 knots Gusts: 31 knots Direction: 213° T

NOAA/NOS/CO-OPS 9752619 Isabel Segunda, Vieques Island, PR



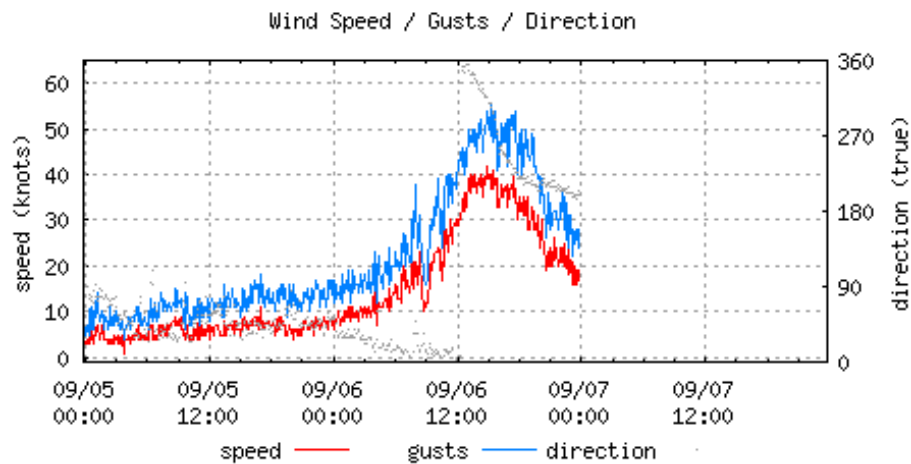
Last Observed Sample: 09/06/2017 23:48 (AST). Data relative to MHHW

Observed: 0.28 ft. Predicted: -0.26 ft. Residual: 0.54 ft.

Historical Maximum Water Level: n/a

Next High Tide: 09/07/2017 09:18 (AST), -0.11 ft.

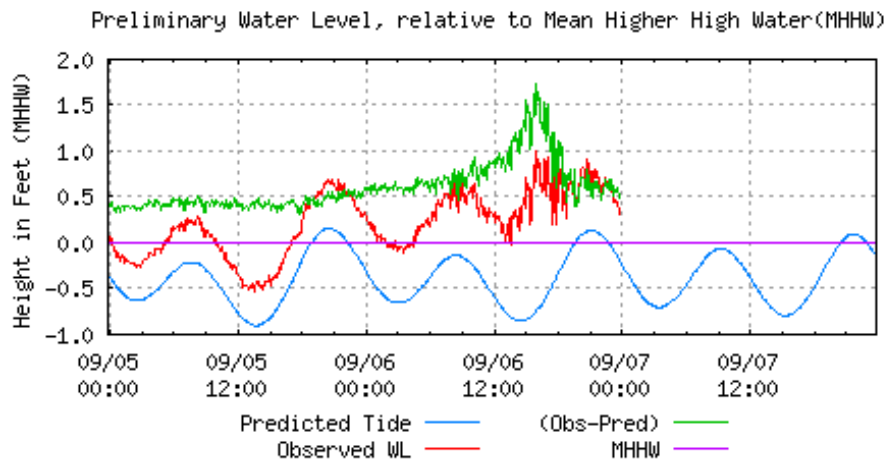
NOAA/NOS/CO-OPS 9752619 Isabel Segunda, Vieques Island, PR



Last Observed Sample: 09/06/2017 23:48 (AST)

Wind Speed: 19 knots Gusts: 28 knots Direction: 200° T

NOAA/NOS/CO-OPS 9752235 Culebra, PR



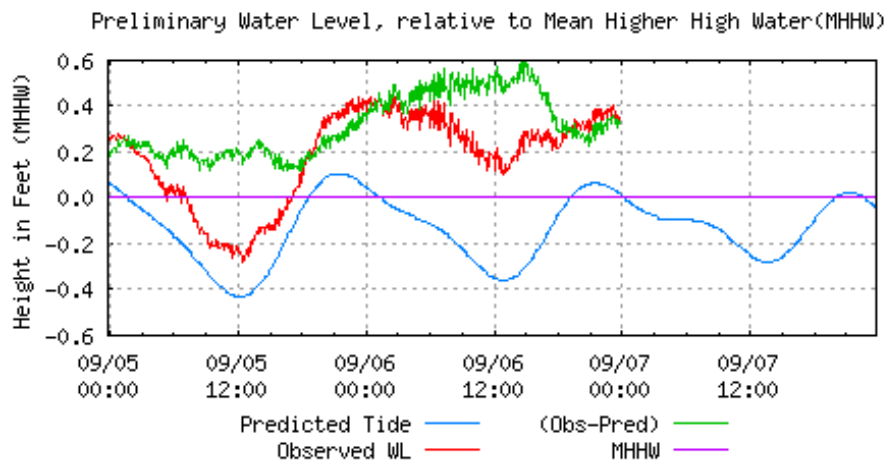
Last Observed Sample: 09/06/2017 23:42 (AST). Data relative to MHHW

Observed: 0.31 ft. Predicted: -0.18 ft. Residual: 0.49 ft.

Historical Maximum Water Level: Nov 6 2006, 0.84 ft.

Next High Tide: 09/07/2017 09:13 (AST), -0.06 ft.

NOAA/NOS/CO-OPS 9751401 Lime Tree Bay, St. Croix, VI



Last Observed Sample: 09/06/2017 23:42 (AST). Data relative to MHHW

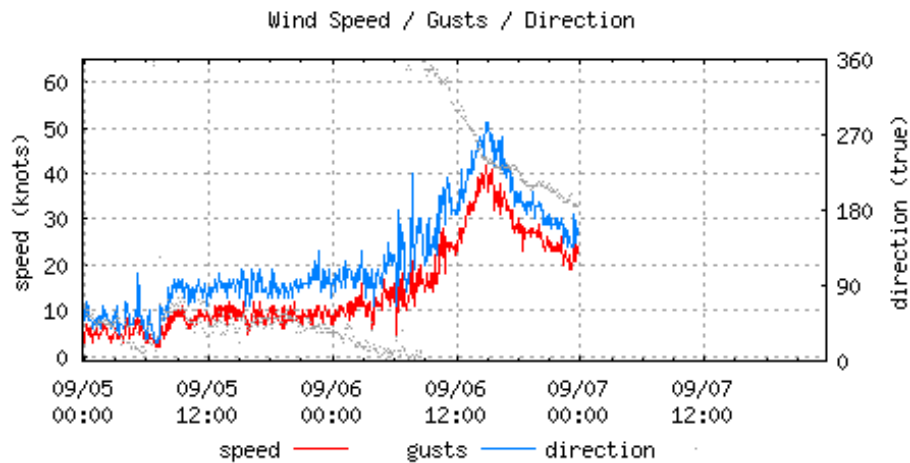
Observed: 0.34 ft. Predicted: 0.02 ft. Residual: 0.32 ft.

Historical Maximum Water Level: Nov 17 1999, 1.88 ft.

Next High Tide: 09/07/2017 21:17 (AST), 0.02 ft.



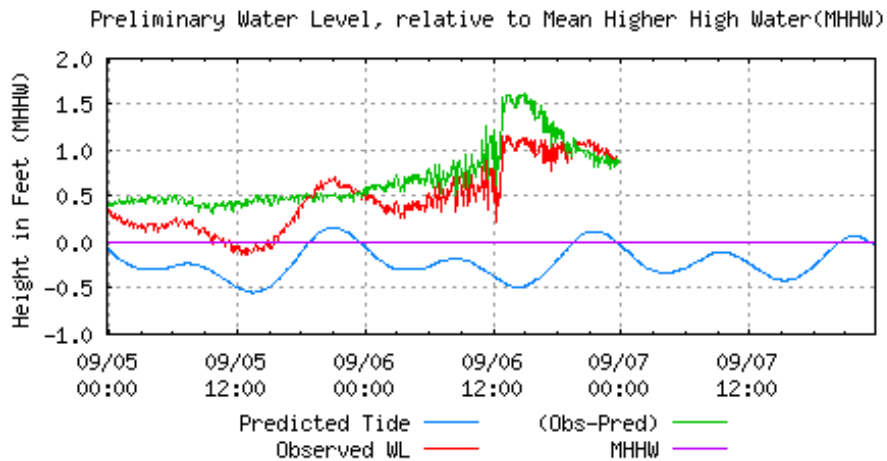
NOAA/NOS/CO-OPS 9751401 Lime Tree Bay, St. Croix, VI



Last Observed Sample: 09/06/2017 23:42 (AST)

Wind Speed: 24 knots Gusts: 28 knots Direction: 186° T

NOAA/NOS/CO-OPS 9751381 Lameshur Bay, St John, VI



Last Observed Sample: 09/06/2017 23:48 (AST). Data relative to MHHW

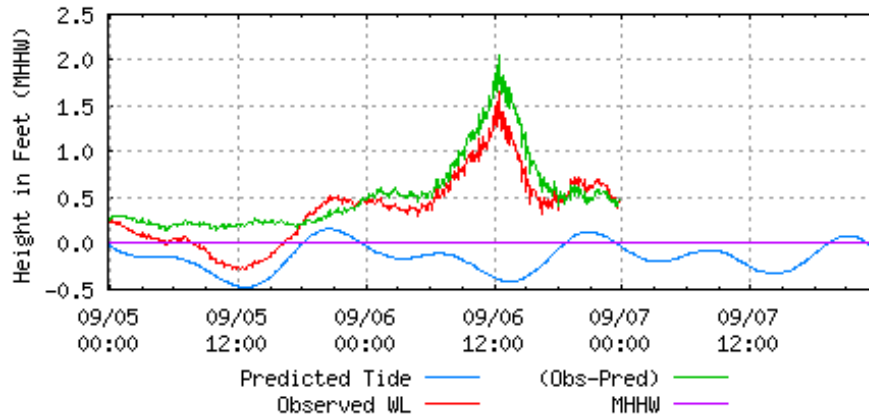
Observed: 0.87 ft. Predicted: -0.02 ft. Residual: 0.89 ft.

Historical Maximum Water Level: Aug 30 2010, 0.89 ft.

Next High Tide: 09/07/2017 09:24 (AST), -0.11 ft.

NOAA/NOS/CO-OPS 9751364 Christiansted Harbor, St Croix, VI

Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 09/06/2017 23:42 (AST). Data relative to MHHW

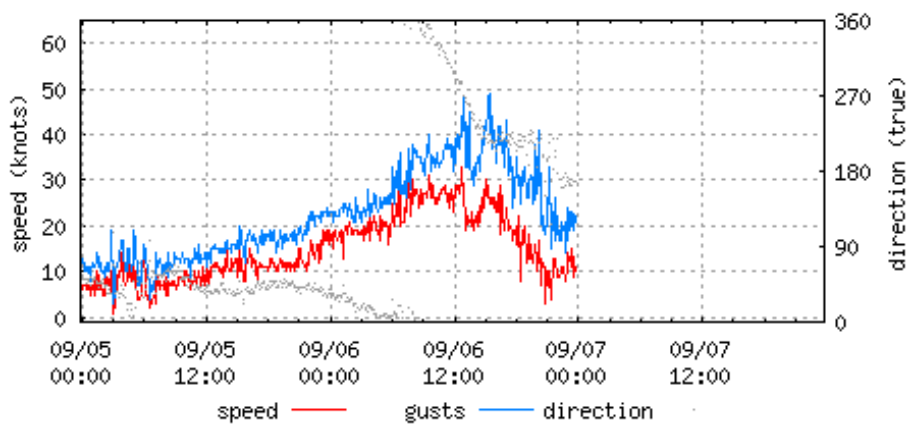
Observed: 0.45 ft. Predicted: -0.02 ft. Residual: 0.47 ft.

Historical Maximum Water Level: Oct 16 2008, 1.17 ft.

Next High Tide: 09/07/2017 08:10 (AST), -0.07 ft.

NOAA/NOS/CO-OPS 9751364 Christiansted Harbor, St Croix, VI

Wind Speed / Gusts / Direction



Last Observed Sample: 09/06/2017 23:42 (AST)

Wind Speed: 11 knots Gusts: 22 knots Direction: 169° T

Latest Water Level Observations on MHHW

Station ID	Station Name	Date/Time	Observed Water Level	Predicted Tide	Residual Water Level	24 Hour Maximum Storm Tide
9759938	Mona Island, PR	09/06/2017 23:48 (AST)	0.83 ft	-0.12 ft	0.95 ft	0.99 ft
9759394	Mayaguez, PR	09/06/2017 23:42 (AST)	0.93 ft	-0.32 ft	1.25 ft	1.11 ft
9759110	Magueyes Island, PR	09/06/2017 23:42 (AST)	0.51 ft	0.07 ft	0.44 ft	0.64 ft
9757809	Arecibo, PR	09/06/2017 23:48 (AST)	0.37 ft	-0.57 ft	0.94 ft	3.30 ft
9755371	San Juan, La Puntilla, San Juan Bay, PR	09/06/2017 23:42 (AST)	0.71 ft	-0.23 ft	0.94 ft	1.27 ft
9754228	Yabucoa Harbor, PR	09/06/2017 23:48 (AST)	0.33 ft	0.00 ft	0.33 ft	0.76 ft
9753216	Fajardo, PR	09/06/2017 23:48 (AST)	0.42 ft	-0.44 ft	0.86 ft	1.21 ft
9752695	Esperanza, Vieques Island, PR	09/06/2017 23:48 (AST)	0.50 ft	-0.01 ft	0.51 ft	1.17 ft
9752619	Isabel Segunda, Vieques Island, PR	09/06/2017 23:48 (AST)	0.28 ft	-0.26 ft	0.54 ft	1.02 ft
9752235	Culebra, PR	09/06/2017 23:42 (AST)	0.31 ft	-0.18 ft	0.49 ft	1.00 ft
9751401	Lime Tree Bay, St. Croix, VI	09/06/2017 23:42 (AST)	0.34 ft	0.02 ft	0.32 ft	0.46 ft
9751381	Lameshur Bay, St John, VI	09/06/2017 23:48 (AST)	0.87 ft	-0.02 ft	0.89 ft	1.15 ft
9751364	Christiansted Harbor, St Croix, VI	09/06/2017 23:42 (AST)	0.45 ft	-0.02 ft	0.47 ft	1.66 ft

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS)  
National Oceanic and Atmospheric Administration | U.S. Department of Commerce